E Appendix E: Example Land Application Permits

A complete list of final Wastewater Land Application permits for Idaho can be viewed at:

http://www.deq.idaho.gov/water/permits_forms/permitting/wlaps_final.cfm

For convenience, a copy of LA-000094-03, the permit for Meadow Creek Property Owners' Association is included on the following pages.

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A. Permit Certificate

MUNICIPAL
WASTEWATER-LAND APPLICATION PERMIT
LA-000094-03

MeadowCreek Property Owners' Association, LOCATED AT **3850 Hot Springs Road, New Meadows, ID 83654** AND IN **Township 19 North, Range 1 East, Section 12, Adams County** IS HEREBY AUTHORIZED TO CONSTRUCT, INSTALL, AND OPERATE A WASTEWATER-LAND APPLICATION TREATMENT SYSTEM IN ACCORDANCE WITH THE WASTEWATER-LAND APPLICATION RULES (IDAPA 58.01.17), THE WATER QUALITY STANDARDS AND WASTEWATER TREATMENT REQUIREMENTS (IDAPA 58.01.02), THE GROUND WATER QUALITY RULE (IDAPA 58.01.11), AND ACCOMPANYING PERMIT APPENDICES AND REFERENCE DOCUMENTS. THIS PERMIT IS EFFECTIVE FROM THE DATE OF SIGNATURE AND EXPIRES ON **July 7, 2009**.

Michael R. McGown, Administrator
Boise Regional Office
Idaho Department of Environmental Quality

Date: 7/7/04

DEPARTMENT OF ENVIRONMENTAL QUALITY
1445 North Orchard
Boise, Idaho 83706-2239
(208) 373-0550

POSTING ON SITE RECOMMENDED

B. Permit Contents, Appendices, and Reference Documents

Appendices

1. Environmental Monitoring Serial Numbers
2. Site Maps

References

1. Plan of Operation (Operation and Maintenance Manual)

The Sections, Appendices, and Reference Documents listed on this page are all elements of Wastewater-Land Application Permit LA-000094-03 and are enforceable as such. This permit does not relieve MeadowCreek Property Owners' Association, hereafter referred to as the permittee, from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

C. Abbreviations, Definitions

Ac-in	Acre-inch. The volume of water or wastewater to cover 1 acre of land to a depth of 1 inch. Equal to 27,154 gallons.
BMP or BMPs	Best Management Practices
COD	Chemical Oxygen Demand
DEQ or the Department	Idaho Department of Environmental Quality
Director	Director of the Idaho Department of Environmental Quality, or the Directors Designee, i.e. Regional Administrator
ET	Evapotranspiration – Loss of water from the soil and vegetation by evaporation and by plant uptake (transpiration)
GS	Growing Season – May 01 through September 30 (153 days)
GW	Ground Water
GWQR	IDAPA 58.01.11 "Ground Water Quality Rule"
Handbook or Guidelines	Handbook for Land Application of Municipal and Industrial Wastewater, DEQ, April 1996.
HLRgs	Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to land application hydraulic management units during the growing season. The HLRgs limit is specified in Section F. Permit Limits and Conditions.
HLRngs	Non-Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to each hydraulic management unit during the non-growing season. The HLRngs limit is specified in Section F. Permit Limits and Conditions.
HMU	Hydraulic Management Unit (Serial Number designation is MU)
IWR	Irrigation Water Requirement – Any combination of wastewater and supplemental irrigation water applied at rates commensurate to the moisture requirements of the crop, and calculated monthly during the growing season (GS). Calculation methodology for the IWR can be found at the following website: http://www.kimberly.uidaho.edu/water/appndxet/index.shtml. The equation used to calculate the IWR at this website is: $IWR = (CU - P_e) / E_i$ CU is the monthly consumptive use for a given crop in a given climatic area. CU is synonymous with crop evapotranspiration P_e is the effective precipitation. CU minus Pe is synonymous with the net irrigation requirement (IR) E_i is the irrigation system efficiency. To obtain the gross irrigation water requirement (IWR), divide the IR by the irrigation system efficiency.
IDAPA	Idaho Administrative Procedures Act.
LG	Lagoon
lb/ac-day	Pounds (of constituent) per acre per day
MG	Million Gallons (1 MG = 36.827 acre-inches)
MGA	Million Gallons Annually (per WLAP Reporting Year)
NGS	Non-Growing Season – October 01 through April 30 (212 days)
NVDS	Non-Volatile Dissolved Solids (= Total Dissolved Solids less Volatile Dissolved Solids)
O&M manual	Operation and Maintenance Manual, also referred to as the Plan of Operation
SAR	Sodium Absorption Ratio
SI	Supplemental Irrigation water applied to the land application treatment site.
Soil AWC	Soil Available Water Holding Capacity - the water storage capability of a soil to a depth at which plant roots will utilize (typically 60 inches or root limiting layer)
SMU	Soil Monitoring Unit (Serial Number designation is SU)
SW	Surface Water
TDS	Total Dissolved Solids or Total Filterable Residue

C. Abbreviations, Definitions

TDIS	Total Dissolved Inorganic Solids – The summation of chemical concentration results in mg/L for the following common ions: calcium, magnesium, potassium, sodium, chloride, sulfate, and 0.6 times alkalinity (alkalinity expressed as calcium carbonate). Nitrate, Silica and fluoride shall be included if present in significant quantities (i.e. > 5 mg/L each).
TMDL	Total Maximum Daily Load – The sum of the individual waste-load allocations (WLA's) for point sources, Load Allocations (LA's) for non-point sources, and natural background. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. IDAPA 58.01.02 *Water Quality Standards and Wastewater Treatment Requirements*
Typical Crop Uptake	Typical Crop Uptake is defined as the median constituent crop uptake from the three (3) most recent years the crop has been grown. Typical Crop Uptake is determined for each hydraulic management unit. For new crops having less than three years of on-site crop uptake data, regional crop yield data and typical nutrient content values, or other values approved by DEQ may be used.
USGS	United States Geological Survey
WLAP	Wastewater Land Application Permit (or Program)
WLAP Reporting Year	The reporting year begins with the non-growing season and extends through the growing season of the following year, October 01 – September 30. For example, the 2000 Reporting Year was October 01, 1999 through September 30, 2000.
WW	Wastewater applied to the land application treatment site

D. Facility Information

Legal Name of Permittee	MeadowCreek Property Owners' Association
Type of Wastewater	Municipal Wastewater
Method of Treatment	Three aerated lagoons, two effluent storage lagoons, effluent chlorination, and slow rate land application.
Type of Facility	Private
Facility Location	3850 Hot Springs Road, New Meadows, ID
Legal Location	Township 19N, Range 1E, Section 12
County	Adams
USGS Quad	New Meadows Quad
Soils on Site	Soil Unit A, west 33% of site: Silty Clay Loams (0-31 inches) Soil Unit B, mid 47% of site: Silty Clay Loams (0-38 inches), Sandy Loam (38-46 inches) Soil Unit C, east 20 % of site: Sandy Clay Loams (0-24 inches), Gravelly Coarse Sand (24-41 inches)
Depth to Ground Water	Minimum measured depth of 4'-3"
Beneficial Uses of Ground Water	Domestic, Irrigation
Nearest Surface Water	Little Salmon River, approximately 300 feet to east
Beneficial Uses of Surface Water	Agriculture, Recreation, Aquatic Life
Responsible Official **Mailing Address** **Phone / Fax**	Douglas A. MacNichol, Facilities Supervisor P.O. Box 415 New Meadows, ID 83654 (208) 347-2260 / (208) 347-3201

E. Compliance Schedule for Required Activities

The Activities in the following table shall be completed on or before the Completion Date unless modified by the Department in writing.

Compliance Activity Number Completion Date	Compliance Activity Description
CA-94-01 **Land Application Plan of Operation** 6 months after permit issuance	An updated Plan of Operation (Operation and Maintenance Manual or O&M Manual) for the wastewater land application facilities, incorporating the requirements of this permit, shall be submitted to DEQ for review and comment. The land application O&M manual shall be designed for use as an operator guide for actual day-to-day operations to meet permit requirements and shall include daily sampling and monitoring requirements to insure proper operation of the wastewater treatment facility. The Plan of Operation shall contain at a minimum all of the information required by the latest revision of the Plan of Operation Checklist in the WLAP Program Guidance. Upon approval, the manual shall be incorporated by reference into this permit and shall be enforceable as a part of this permit.
CA-94-02 **Seepage Rate Testing, Part 1** 1 month after permit issuance	Conduct seepage rate testing on the five (5) lagoons in accordance with DEQ procedures (refer to DEQ internet site) or a method approved by DEQ. Complete seepage rate tests and submit results for DEQ review and approval.
CA-94-03 **Seepage Rate Testing, Part 2** As specified	DEQ practice generally allows 0.125 inches/day or less for existing wastewater structures or ponds. If a structure or pond does not meet these seepage requirements, submit a plan and schedule for DEQ review within 90 days after DEQ review and approval of the seepage test results, to either repair, replace, or abandon the structure or pond.
CA-94-03 **Fuel Storage Containment** 6 months after permit issuance	Provide secondary containment capacity for the fuel storage area (250-gallon gasoline tank and 500 gallon diesel tank). The recommended minimum containment capacity is 110% of the largest tank volume. Submit plans for DEQ review and approval prior to construction activities.
CA-94-04 **Sewer Capacity Study** 12 months after permit issuance	A Sewer Capacity Study report shall be submitted to DEQ for review and approval. Goals of the study include: 1. Evaluate impacts of infiltration/inflow (I/I) on the capacity of the treatment and storage systems and on future sewer connections; 2. Identify number of existing sewer connections and the number of connections expected at build-out; 3. Perform a hydraulic balance on the five lagoons reflecting I/I contributions and lagoon operations (including minimum depths and freeboard); 4. Identify maintenance needs and propose modifications to the collection system that would reduce I/I, including an evaluation of the submerged manholes and the recently installed lift station; 5. Present a detailed schedule for the implementation of study recommendations.

F. Permit Limits and Conditions

1) The Permittee is allowed to apply wastewater and treat it on a land application site as prescribed in the tables below and in accordance with all other applicable permit conditions and schedules.

Category	Permitted Limits and Conditions
Type of Wastewater	Municipal Wastewater
Application Site Area	37 acres
Application Season	Growing season only, May 1 through September 30
Certified Operator	The permittee shall comply with the Operator Certification requirements specified in the Water Quality Standards and Wastewater Treatment Requirements (IDAPA 58.01.02) Sections 403-413. The system shall be operated and managed by personnel certified and licensed in the State of Idaho wastewater operator-training program at a Class I level or higher and properly trained to operate and maintain the system.
Reporting Year for Annual Loading Rates	October 1 through September 30
Maximum Hydraulic Loading Rate, Growing Season **(includes wastewater and supplemental irrigation water, if used)**	Growing Season (GS) Hydraulic Loading Rate shall be no greater than the Irrigation Water Requirement (IWR) using data from the tables of the following University of Idaho web site: http://www.kimberly.uidaho.edu/water/appndxet/index.shtml. IWR is equal to the Mean IR data from these tables divided by the irrigation system efficiency. In lieu of these tables, current climatic and evaporation data, or 30-year average data may be used to calculate the IWR, as defined in the 1994 Technical Interpretive Supplement, pages IV-6 and IV-7. Assume no carryover soil moisture and a leaching rate of zero in calculating the IWR. Application shall generally follow consumptive use rates for the crop throughout the season.
Runoff Management	The permittee shall prepare and submit to DEQ for approval a runoff management plan with control structures and other BMPs (e.g. collection basins, berms, etc.) designed to prevent runoff from any site or fields used for wastewater land application to property not permitted for land application except in the event of a 25-year, 24-hour storm event or greater, using Western Regional Climate Center (WRCC) Precipitation Frequency Map, Figure 28 'Isopluvials of 25-YR, 24-HR Precipitation'. For this site, the 25-year, 24-hour event is 2.8 inches. Upon approval of the plan by DEQ, the permittee shall implement the runoff management plan, and shall construct, operate, and maintain the control structures and other BMPs in accordance with the plan.
Ground Water Quality	Ground Water Quality shall be in compliance with *Idaho Ground Water Quality Rule* IDAPA 58.01.11
Maximum COD Loading, seasonal average in pounds per acre-day, each HMU	50 pounds/acre-day seasonal average

F. Permit Limits and Conditions

Category	Permitted Limits and Conditions
Maximum Nitrogen Loading Rate, pounds per acre-year, each HMU (from all sources including waste solids and supplemental fertilizers)	150% of typical crop uptake (see definition), or UI Fertility Guide.
Maximum Phosphorus Loading Rate, pounds / acre-year, each HMU (from all sources including waste solids and supplemental fertilizers)	None. DEQ reserves the right to re-open this permit for inclusion of phosphorus limits.
Construction Plans	Prior to construction or modification of all wastewater facilities associated with the land application system or expansion, detailed plans and specifications shall be reviewed and approved by DEQ. Within 30 days of completion of construction, the permittee shall submit as-built plans for review and approval.
Grazing	A grazing management plan shall be submitted to DEQ for review and approval prior to any grazing activities. Grazing Plans shall follow the guidance located on the DEQ Internet site: http://www.deq.state.id.us/water/wastewater/guidance_grazing.doc
Allowable crops	Crops grown for direct human consumption (those crops that are not processed prior to consumption) are not allowed.
Posting	Signs shall be posted every 500 feet designating the fields as wastewater reuse areas or equivalent.
Supplemental Irrigation Water Protection	For systems with wastewater and fresh irrigation water interconnections, DEQ-approved backflow prevention devices are required for protection of fresh irrigation water sources.
Odor Management	The wastewater treatment plant, land application facilities, and other operations associated with the facility shall not create a public health hazard or nuisance conditions, including odors.
Buffer Zones	The following minimum distances shall be provided between the buffer objects listed below and the land application treatment site: Domestic Water Wells: 500 feet Municipal Water Wells: 1,000 feet Inhabited Dwellings: 300 feet Natural Surface Waters: 100 feet Man-made Surface Waters (canal): 50 feet Areas of Public Access: 50 feet
Total Coliform, wastewater applied to land application site	The median number of total coliform organisms shall not exceed 23 per 100 milliliters, as determined from the results of the last five (5) days for which analyses have been completed. In addition, the number of total coliform organisms shall not exceed 240 per 100 milliliters in any confirmed sample.

G. Monitoring Requirements

1) Appropriate analytical methods, as given in the *Handbook for Land Application of Municipal and Industrial Wastewater, April 1996*, or as approved by the Idaho Department of Environmental Quality (hereinafter referred to as DEQ), shall be employed. A description of approved sample collection methods, appropriate analytical methods and companion QA/QC protocol shall be included in the Operation and Maintenance Manual.
2) The permittee shall monitor and measure parameters and submit information as stated in the Facility Monitoring Table in this section.
3) Samples shall be collected at times and locations that represent typical environmental and process parameters being monitored.
4) Monitoring locations are described in Appendix 1. Environmental Monitoring Serial Numbers.
5) Monitoring is required at the frequency shown in the table below if wastewater is applied anytime during the time period shown. Unless otherwise agreed in writing by the DEQ, data collected and submitted shall include, but not be limited to, the parameters and frequencies in the Facility Monitoring Table as follows.
6) If the soil management unit is less than 15 acres, use 5 sub-samples. If the soil management unit is greater than 15 acres, use 10 sub-samples.
7) Three (3) soil samples shall be collected at each sub-sample location, one at 0-12 inches, one at 12-24 inches, and one at 24-36 inches. The soil samples collected at 0-12 inches from each sub-sample location shall be composited. Similarly, all soil samples collected at 12-24 inches shall be composited and all soil samples collected at 24-36 inches shall be composited. This method will yield three samples for analysis, one for 0-12 inches, one for 12-24 inches and one for 24-36 inches for each soil management unit.
8) Ground Water Monitoring Procedure: Ground Water Monitoring Wells shall be purged a minimum of three casing volumes and/or until field measurements for pH, specific conductance and temperature meet the following conditions: two successive temperature values measured at least five minutes apart are within one degree Celsius of each other, pH values for two successive measurements measured at least five minutes apart are within 0.2 units of each other, and two successive specific conductance values measured at least five minutes apart are within 10% of each other. This procedure will determine when the wells are suitable for sampling for constituents required by the permit. Other procedures, such as low flow sampling, may be considered by DEQ for approval. The static water level shall be measured prior to pumping or sampling for ground water.
9) Annual reporting of monitoring requirements is described in Section H, Standard Reporting Requirements.

Facility Monitoring Table

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Daily (when land applying)	Flow Meter	Volume of Wastewater land applied	Gallons/month and acre-inches/month applied to each Hydraulic Management Unit
Daily (when land applying)	Flow Meter	Volume of Supplemental Irrigation Water land applied	Gallons/month and acre-inches/month applied to each Hydraulic Management Unit
Weekly (when land applying)	Discharge Point of Wastewater to Land Application	Grab sample	Total Coliform
Monthly (when land applying)	Discharge Point of Wastewater to Land Application	Grab Sample	Total Kjeldahl Nitrogen, Nitrate+Nitrite-Nitrogen, Total Dissolved Solids, pH, Chemical Oxygen Demand, Total Phosphorus
Monthly	Plant Influent Flow Meter	Volume of Treatment System Influent	Influent Volume in Gallons per month

G. Monitoring Requirements

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Monthly	Treatment and Storage Ponds	Visual, Calculation	Storage Volume in Gallons
Three Times Annually (April, July, October)	Ground Water Monitoring Wells, Listed in Appendix 1	See Note 8 above	Total Phosphorus, Chloride, Total Dissolved Solids, Nitrate-N, Total Iron, Total Manganese, Dissolved Iron[1], Dissolved Manganese[1], Total Coliform, Total Suspended Solids, Static Water Level
Twice Annually (April, October)	Soil Monitoring unit	Composite Soil Sample (see Note 7 above)	Electrical Conductivity, Nitrate-N, Ammonium-N, pH, Plant Available Phosphorous – (use Olsen method for soils with pH 6.5 or greater, use Bray method if soil pH is less than 6.5)
Annually (if supplemental irrigation water is used on land application site)	Supplemental Irrigation Water	Grab Sample	Total Kjeldahl Nitrogen, Nitrate+Nitrite-Nitrogen, Total Dissolved Solids, pH, Chemical Oxygen Demand, Total Phosphorus
Annually	Hydraulic management unit	Acres used for land application	Acres
Annually	Hydraulic management unit	COD loading calculation (growing season average)	COD applied in lbs/acre-day
Annually	Hydraulic management unit	Report total nitrogen and phosphorus load from fertilizer and all other non-wastewater application	Nitrogen and phosphorus applied in lbs/acre-year
Annually	Hydraulic management unit	Calculate and report total nitrogen and phosphorus loading from wastewater	Nitrogen and phosphorus applied in lbs/acre-year
Annually	Hydraulic management unit	Crop Yield Calculation and Crop Type	Tons/acre, lbs/acre, or bushels/acre
Annually	Hydraulic management unit	Crop Nutrient Uptake from Crop Tissue Analysis or from standard tables for Crop Type and yield.	Nitrogen and phosphorus uptake in lbs/acre-year
Annually	Hydraulic management unit	Calculate Irrigation Water Requirement for Crop Grown	Volume (inches / acre and total gallons) for each month for growing season.
Annually	Hydraulic management unit	Calculate growing season wastewater loading rate	Volume (inches / acre and total gallons) for each month for growing season.

G. Monitoring Requirements

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Annually	All supplemental irrigation pumps directly connected to the wastewater distribution system.	Backflow testing	Document the testing of all backflow prevention devices for all supplemental irrigation pumps directly connected to the wastewater distribution system(s). Report the testing date(s) and results of the test (pass or fail). If any test failed, report the date of repair or replacement of backflow prevention device, and if the repaired/replaced device is operating correctly.
Every two years, starting with first year of permit	All flow measurement locations.	Flow measurement calibration of all flows to land application.	Document the flow measurement calibration of all flow meters and pumps used directly or indirectly to measure all wastewater and supplemental irrigation water flows applied to each HMU.
First year and last (5th) year of permit, sample in September 2004 and September 2009	Curtain Drain Water	Grab Sample	Total Kjeldahl Nitrogen, Nitrate+Nitrite-Nitrogen, Total Dissolved Solids, pH, Chemical Oxygen Demand, Total Phosphorus
Annually in July **(if necessary based on Little Salmon river sampling results provided by the Idaho Department of Agriculture)**	Little Salmon River upgradient and downgradient of land application site	At sample locations approved by DEQ	To be determined

1. Analytical results are required for dissolved iron and/or manganese only if the results for total iron and/or manganese exceed the standards in IDAPA 58.01.11.200.01.b.

H. Standard Reporting Requirements

1. The permittee shall submit an Annual Wastewater-Land Application Site Performance Report ("Annual Report") prepared by a competent environmental professional no later than January 31 of each year which shall cover the previous year (see section F for WLAP reporting period). The Annual Report shall include results for monitoring required in Section G, status of compliance activities, and an interpretive discussion of monitoring data (ground water, vadose zone, hydraulic loading, wastewater etc.) with particular respect to environmental impacts by the facility.

2. The annual report shall contain the results of the required monitoring as described in Section G. Monitoring Requirements. If the permittee monitors any parameter more frequently than required by this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the annual report.

3. The annual report shall be submitted to the Engineering Manager in the applicable Regional DEQ Office.

Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239
208-373-0550

Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814
208-769-1422

Idaho Falls Regional Office
900 N. Skyline, Suite B
Idaho Falls, ID 83402
208-528-2650

Lewiston Regional Office
1118 "F" Street
Lewiston, ID 83501
208-799-4370

Pocatello Regional Office
444 Hospital Way, #300
Pocatello, ID 83201
208-236-6160

Twin Falls Regional Office
601 Pole Line Road, Suite 2
Twin Falls, ID 83301
208-736-2190

A copy of the annual report shall also be mailed to:

Richard Huddleston, P.E.
Wastewater Program Manager
1410 N. Hilton
Boise, ID 83706
208-373-0561

4. Notice of completion of any work described in Section E. Compliance Schedule for Required Activities shall be submitted to the Department within 30 days of activity completion. The status of all other work described in Section E shall be submitted with the Annual Report.

5. All laboratory reports containing the sample results for monitoring required by Section G. Monitoring Requirements of this permit shall be submitted with the Annual Report.

I. Standard Permit Conditions: Procedures and Reporting

1. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the permittee to comply with all conditions of the permit or the Wastewater-Land Application Permit Regulations, in conformance with a DEQ approved, current Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. This Plan of Operations shall be updated as necessary to reflect current operations.

2. Wastewater(s) or recharge waters applied to the land surface must be restricted to the premises of the application site unless permission has been obtained from the DEQ authorizing a discharge into the waters of the State as stated in IDAPA 58.01.02.600.02.

3. Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.02.600.03. In order to prevent public health hazards and nuisance conditions the permittee shall:

   a. Apply wastewater as evenly as practicable to the treatment area;
   b. Prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects; and
   c. Prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.

4. The permittee shall:

   a. Manage the wastewater land application treatment site as an agronomic operation where vegetative cover is grown and harvested or grazed to utilize the nutrients and minerals in the wastewater, and,
   b. Not hydraulically overload any particular areas of the wastewater land application treatment site.

5. All waste solids, including dredgings and sludges, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.

6. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit at least six months prior to the expiration date of the existing permit in accordance with the Waste Water Land Application Permit Regulations and include seepage tests on all lagoons per latest DEQ procedures.

7. The permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:

   a. Enter the permitted facility,
   b. Inspect any records that must be kept under the conditions of the permit.
   c. Inspect any facility, equipment, practice, or operation permitted or required by the permit.
   d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.

8. The permittee shall report to the Director under the circumstances and in the manner specified in this section:

   a. In writing thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process.
   b. In writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations.
   c. Orally within twenty-four (24) hours from the time the permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director (see below)

      DEQ Regional Office: see Permit Certification Page
      Emergency 24 Hour Number 1-800-632-8000

I. Standard Permit Conditions: Procedures and Reporting

d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any non-compliance unless extended by the DEQ. This report shall contain:

   i. A description of the non-compliance and its cause;
   ii. The period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and
   iii. Steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.

e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report.

9. The permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit noncompliance.

10. The permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. Also address these control operations in an update to the Operations and Maintenance Manual.

J. Standard Permit Conditions: Modifications, Violations, and Revocations

1. The permittee shall furnish to the Director within reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these regulations.

2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.

3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in I. *Standard Reporting Requirements*, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.

4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.

5. Any person violating any provision of the Waste Water Land Application Permit Regulations, or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars ($10,000) or one thousand dollars ($1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor.

6. The Director may revoke a permit if the permittee violates any permit condition or the Wastewater Land Application Permit Regulations.

7. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within thirty-five (35) days of receipt of the notice by the permittee, unless within that time the permittee request an administrative hearing in writing to the Board of the Department of Environmental Quality pursuant to the Rules of Administrative Procedures contained in IDAPA 58.01.23.

8. If, pursuant to Idaho Code 67-5247, the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, a revocation hearing before the Board of the Department of Environmental Quality shall be provided. Such hearings shall be conducted in accordance with the Rules of Administrative Procedures contained in IDAPA 58.01.23..

9. The provisions of this permit are severable and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.

10. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted land application facility from service, including any treatment, storage, or other facilities or equipment associated with the land application site. Prior to commencing closure activities, the permittee shall: a) participate in a pre-site closure meeting with the DEQ; b) develop a site closure plan that identifies specific closure, site characterization, or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and c) submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.

Appendix 1
Environmental Monitoring Serial Numbers

HYDRAULIC MANAGEMENT UNITS

Serial Number	Description	Acres
MU-009402	Field 2	37

WASTEWATER & IRRIGATION WATER SAMPLING POINTS

Serial Number	Description
WW-009401	Treated wastewater prior to land application
SI-009401	Supplemental Irrigation Water

SURFACE WATER SAMPLING POINTS

Serial Number	Description
SW-009401	Curtain Drain Water
SW-009402	Little Salmon River upgradient
SW-009403	Little Salmon River downgradient

SOIL MONITORING UNITS

Serial Number	Description	Associated MU
SU-009402	Field 2	MU-009402

GROUND WATER MONITORING

Serial Number	Common Designation	Location
GW-009401	MW-1	Upgradient, south of lagoon 5
GW-009402	MW-2	Upgradient, west of land application area
GW-009403	MW-3S	Downgradient, east of land application area
GW-009404	MW-3D	Downgradient, east of land application area
GW-009405	MW-4	Downgradient, SE of land application area
GW-009406	MW-5S	Northeast of lagoon 3
GW-009407	MW-5D	Northeast of lagoon 3
GW-009408	MW-6	East of lagoon 4

Appendix 1
Environmental Monitoring Serial Numbers

LAGOONS

Serial Number	Description
LG-009401	Lagoon No. 1
LG-009402	Lagoon No. 2
LG-009403	Lagoon No. 3
LG-009404	Lagoon No. 4
LG-009405	Lagoon No. 5

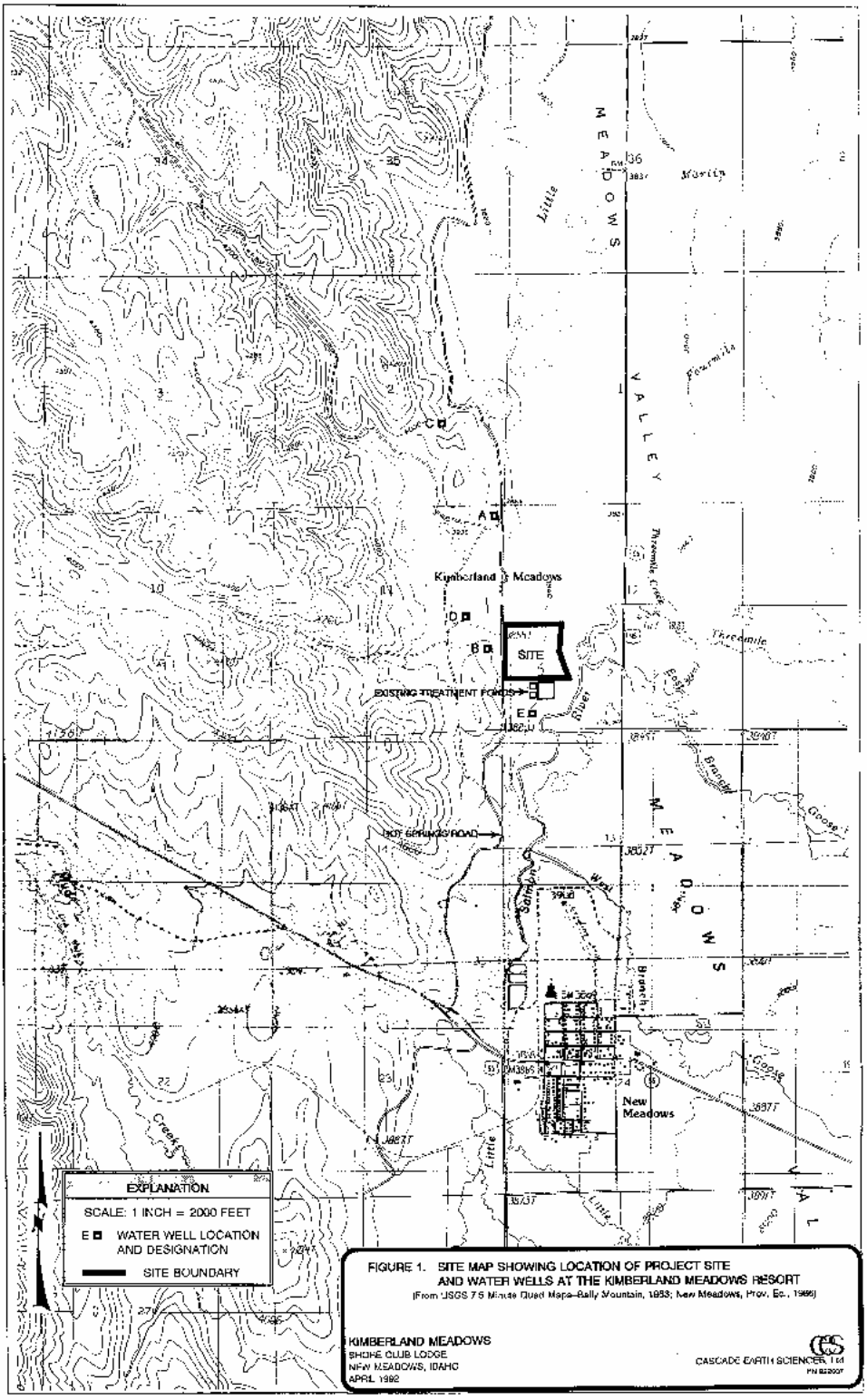
Appendix 2
Site Maps

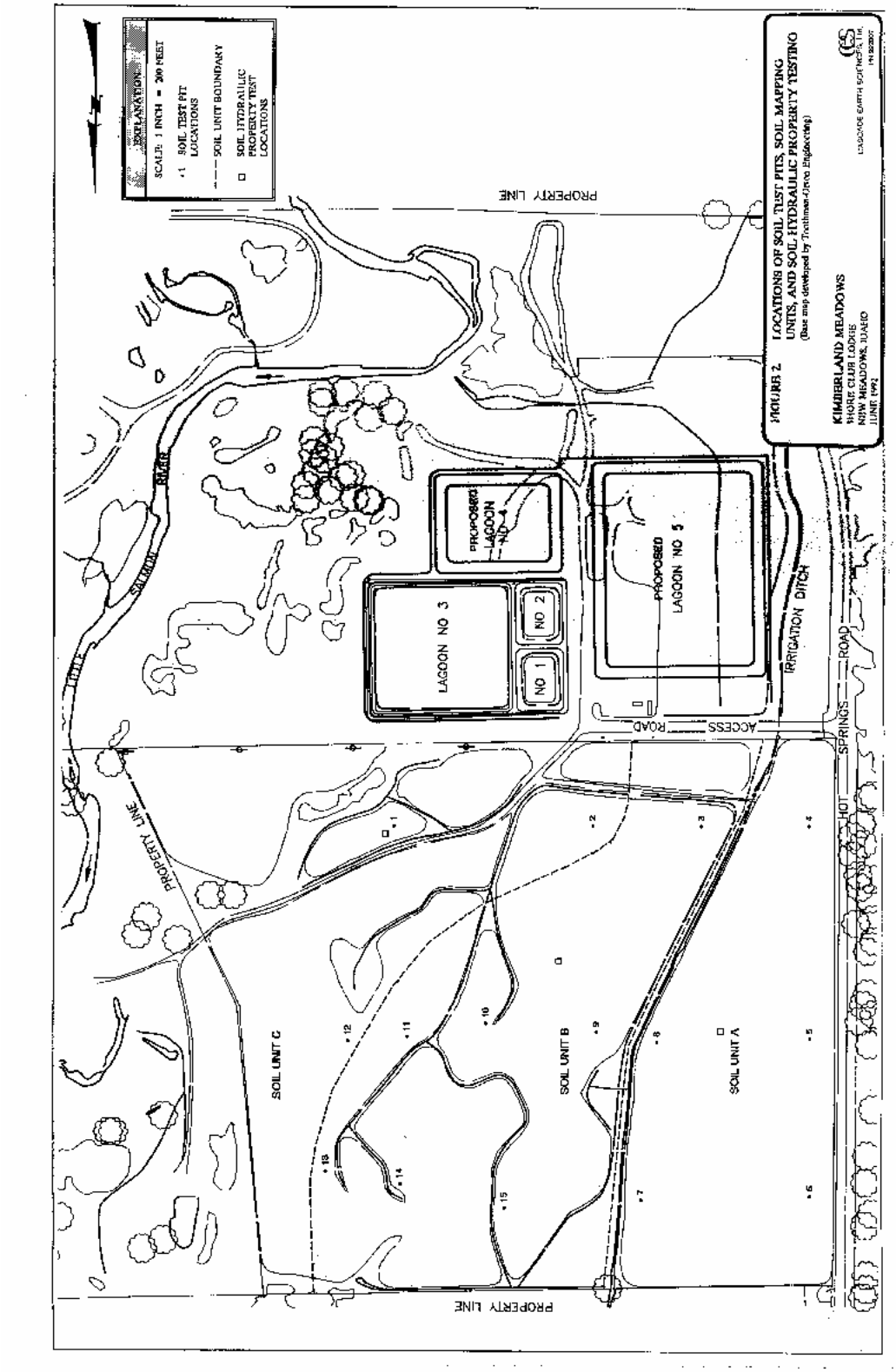
Site Map 1: **Figure 1**, Site Map Showing Location of Project Site and Water Wells

Site Map 2: **Figure 2**, Locations of Soil Test Pits, Soil Mapping Units, and Soil Hydraulic Property Testing

Site Map 3: **Figure I-1**, Treatment System

Site Map 4: **Figure 12**, Site Plan Showing Monitoring Well Locations and Groundwater Elevation, May 27, 1992


MEADOWS
VALLEY
MEADOWS
Kimberland Meadows
SITE
EXISTING TREATMENT PONDS
HOT SPRINGS ROAD
New Meadows
EXPLANATION
SCALE: 1 INCH = 2000 FEET
WATER WELL LOCATION AND DESIGNATION
SITE BOUNDARY
FIGURE 1. SITE MAP SHOWING LOCATION OF PROJECT SITE AND WATER WELLS AT THE KIMBERLAND MEADOWS RESORT
(From USGS 7.5 Minute Quad Maps–Rally Mountain, 1953; New Meadows, Prov. Ed., 1966)
KIMBERLAND MEADOWS
SHORE CLUB LODGE
NEW MEADOWS, IDAHO
APRIL 1992
CASCADE EARTH SCIENCES, Ltd


EXPLANATION
SCALE: 1 INCH = 200 FEET
SOIL TEST PIT LOCATIONS
SOIL UNIT BOUNDARY
SOIL HYDRAULIC PROPERTY TEST LOCATIONS
FIGURE 2
LOCATIONS OF SOIL TEST PITS, SOIL MAPPING UNITS, AND SOIL HYDRAULIC PROPERTY TESTING
(Base map developed by Toothman-Orme Engineering)
KIMBERLAND MEADOWS
HORSE CLUB LODGE
NEW MEADOWS, IDAHO
JUNE 1992
PROPERTY LINE
PROPOSED LAGOON NO 4
PROPOSED LAGOON NO 5
LAGOON NO 3
NO 2
NO 1
ACCESS ROAD
IRRIGATION DITCH
HOT SPRINGS ROAD
SOIL UNIT C
SOIL UNIT B
SOIL UNIT A
SALMON

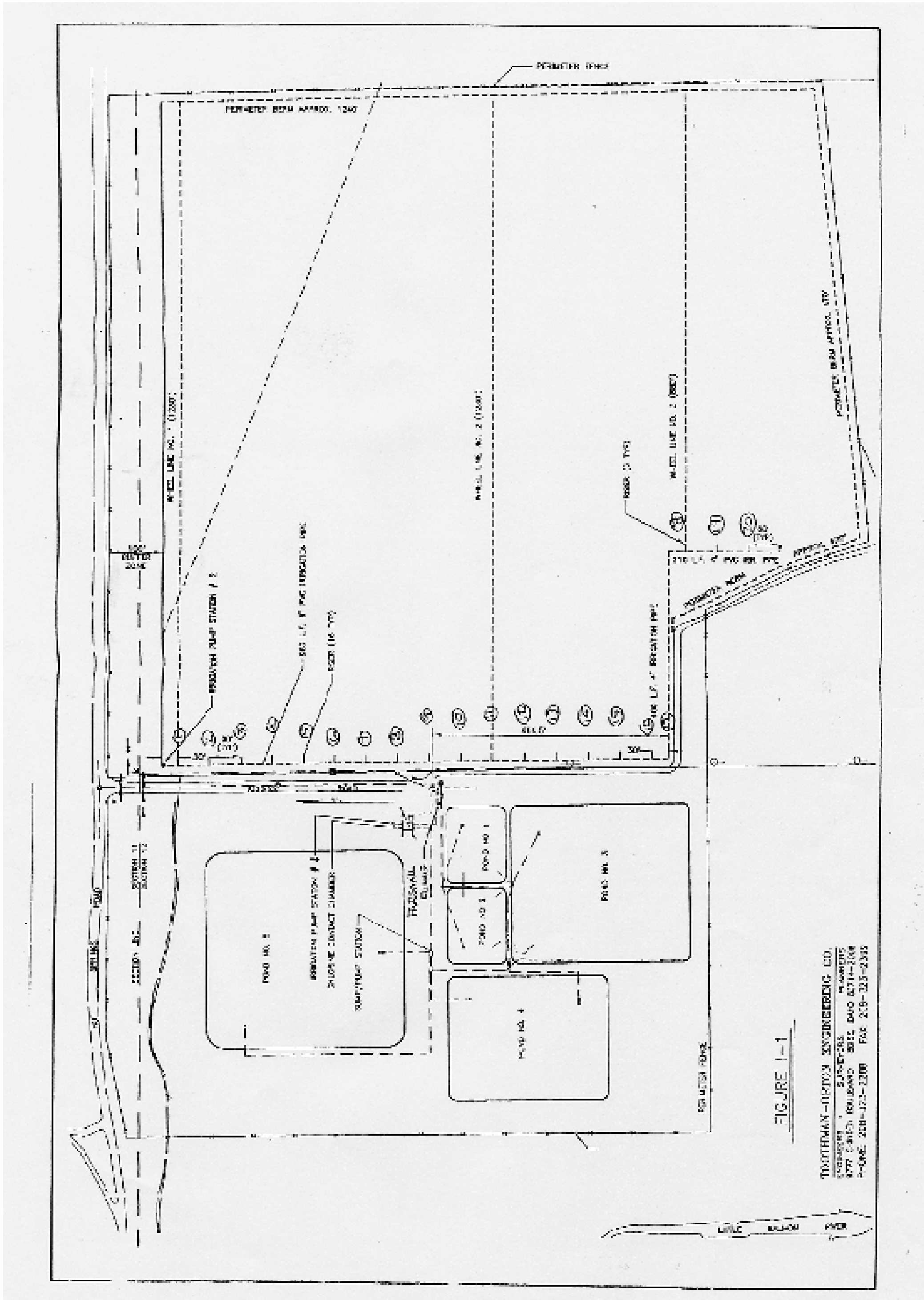


FIGURE 1-1
TOOTHMAN-ORTON ENGINEERING CO.

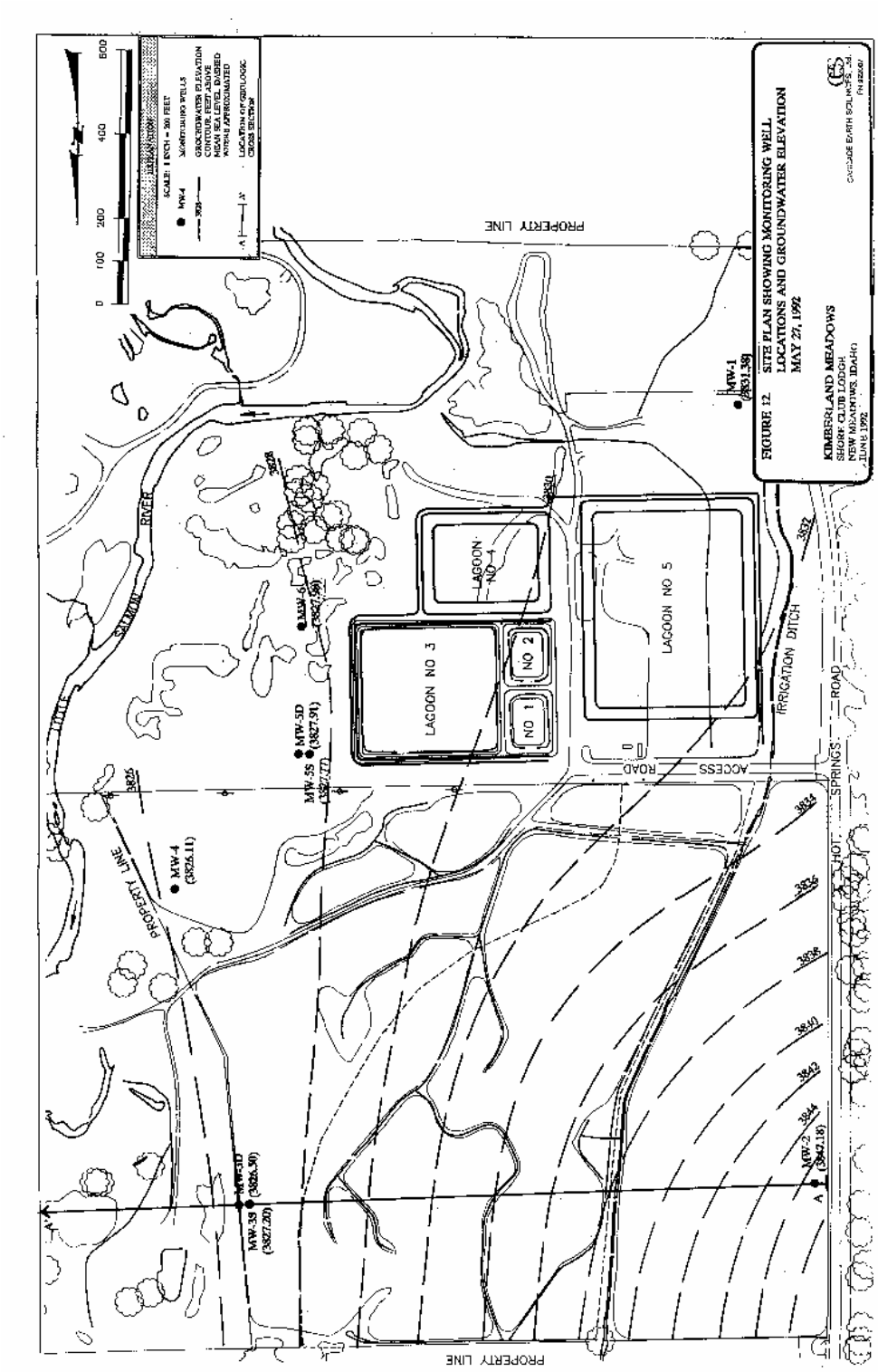


FIGURE 12. SITE PLAN SHOWING MONITORING WELL LOCATIONS AND GROUNDWATER ELEVATION MAY 27, 1992
KIMBERLAND MEADOWS
SNAKE RIVER
LAGOON NO 3
LAGOON NO 5
LAGOON NO 1
NO 2
NO 1
ACCESS ROAD
IRRIGATION DITCH
HOT SPRINGS ROAD
PROPERTY LINE
MW-1 (3831.39)
MW-2 (3840.16)
MW-3 (3827.20)
MW-3D (3826.50)
MW-4 (3825.11)
MW-5 (3827.59)
MW-5D (3827.91)
MW-55 (3827.77)
3825
3826
3827
3828
3830
3832
3834
3836
3838
3840
3842
3844